

# **The State of Washington's Proposed Wapato Hills-Puyallup River Valley PM<sub>2.5</sub> Nonattainment Area**

Washington State Department of Ecology  
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## Proposed Nonattainment Area

The Washington State Department of Ecology (Ecology) is proposing the boundary for the Wapato Hills-Puyallup River Valley PM<sub>2.5</sub> Nonattainment Area shown on the attached map. The proposed nonattainment area does not include trust lands within the Puyallup Indian Reservation. Congress explicitly provided state and local agencies authority over activities on non-trust lands within the Puyallup Indian Reservation under the Puyallup Tribe of Indians Settlement Act of 1989, 25 U.S.C. 1773. EPA is responsible for air quality on trust lands.

Ecology's proposal revises the nonattainment area proposed by the Puget Sound Clean Air Agency (PSCAA) in *Fine Particulate Matter Non-Attainment Area Recommendation for the Tacoma Area* (PSCAA, October 26, 2007, p. 3). Ecology revised PSCAA's nonattainment area by

- Adjusting the northeast boundary to reflect topography
- Removing the City of Tacoma's Point Defiance Park from the nonattainment area
- Revising the western boundary at American Lake to the boundary between the City of Lakewood and North Fort Lewis

The revised northeast boundary is as follows:

- Starting from where an extension of Kennedy Road Northeast would intersect Commencement Bay, proceed north to the intersection of Marine View Drive (State Route 509) and Kennedy Road Northeast.
- Proceed south on Marine View Drive to Hylebos Creek.
- Proceed south along Hylebos Creek to 12th Street East.
- Proceed east on 12th Street East to 70th Avenue East.
- Proceed south on 70th Avenue East to State Route 99 (S.R. 99).
- Proceed north on S.R. 99 0.1 mile north of Birch Street to a driveway to the east.
- Proceed east along the driveway and continue east along the same alignment to the Pierce County Line/Comprehensive Urban Growth Area (CUGA) boundary.
- Proceed east along the previously defined nonattainment area boundary.

These revisions to the boundary do not fundamentally alter PSCAA's analysis of factors specified by the United States Environmental Protection Agency (EPA) for determining a nonattainment area and Ecology is not updating the analysis. PSCAA's analysis referenced above should be consulted for further information.

## Background

In December 2007 Ecology recommended to the United States Environment Protection Agency (EPA) that a portion of Pierce County be designated nonattainment because of continued violations of the 24-hour PM<sub>2.5</sub> standard. EPA's 2007 guidance on PM<sub>2.5</sub> nonattainment areas requests that a recommendation of nonattainment be accompanied by a proposed nonattainment area. Ecology made a commitment to submit a proposed nonattainment area to EPA by February 15, 2008.

Ecology took PSCAA's proposed area to public hearing on December 5, 2007. PSCAA developed the proposed nonattainment area based upon the nine factors specified in EPA's 2007 guidance. PSCAA's development of the boundary involved meetings and conference calls with agencies and organizations in the affected area. As result of comments to the public record, Ecology decided to evaluate the proposed nonattainment area further because of comments received at the public hearing and later discussions with stakeholders.

## Evaluation

Ecology focused its analysis on three areas: Pierce-King County Line, Point Defiance Park and American Lake.

### *Pierce-King County Line*

Throughout the area near the Pierce-King County Line, sites are either on highlands or in valleys with little in-between. The county line runs from Dash Point north of Commencement Bay up steep bluffs to highlands, across the highlands to steep slopes descending into the relatively broad and flat valley. The valley contains major north-south highways—Interstate 5 (I-5) and State Road 99 (S.R. 99)—and has an ascending gradient to the north. The northeast shore of Commencement Bay and the Lower Puyallup River Valley is bordered by steep bluffs surrounding the highlands. The bluffs continue southeast almost to S.R. 99 before becoming the dividing point between the Lower Puyallup River Valley and the valley to the north containing the major highways. The valley is bounded by steep, wooded slopes.

Ecology's analysis found that the highlands are in a different air shed from the land to the south. Further, the bluffs bordering Commencement Bay and the river valley help trap fine particulates and increase pollutant concentrations during inversions that occur in the winter months.

Because of the relation between topography and air quality, Ecology decided to revise the northeast boundary of the proposed nonattainment area to reflect topography. A boundary could be based on elevation or a series of elevations or other geographic markers, but the line would be difficult to follow or locate on the ground. Ecology determined the steep bluffs and slopes in this area provide an opportunity to use surrogates in the valleys to reasonably represent a nonattainment area boundary reflecting the bluffs and steep valley slopes. Available surrogates include roads and a stream. Use of a surrogate boundary does not exclude any major sources from the nonattainment area.

The northeast boundary of proposed nonattainment area based on surrogates follows Marine Drive East (S.R. 509) below the bluffs along Commencement Bay southeast until the road intersects Hylebos Creek, follows Hylebos Creek south to roads that lead to S.R. 99, follows the S.R. 99 north to a driveway to the east that aligns with the Pierce-King County Line to the east, and thence east to the Pierce County Line/CUGA boundary and the boundary proposed by PSCAA. A more detailed description of the boundary delineated by the surrogates is found above in the Actions section.

#### *Point Defiance Park*

Ecology decided to eliminate Point Defiance Park from the proposed nonattainment area because the area does not significantly contribute to nonattainment.

Largely a natural, heavily wooded area, Point Defiance Park is the 100-year old crown jewel of City of Tacoma park system. While the Park includes Tacoma Zoo and Aquarium, only 105 of the Park's 702 acres are maintained. The Park is separated from the developed area of Tacoma by its location on a headland between Tacoma Narrows and Commencement Bay. The Park has no major air pollutant sources.

#### *American Lake*

Ecology decided to revise the western boundary at American Lake to the boundary between the City of Lakewood and North Fort Lewis. This jurisdictional boundary crosses American Lake. PSCAA had proposed following the shoreline of American Lake within the City of Lakewood. Use of the jurisdictional boundary is consistent with the decision to exclude military lands from the proposed nonattainment area.



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